Hurricane Exercise Projected Damage Areas

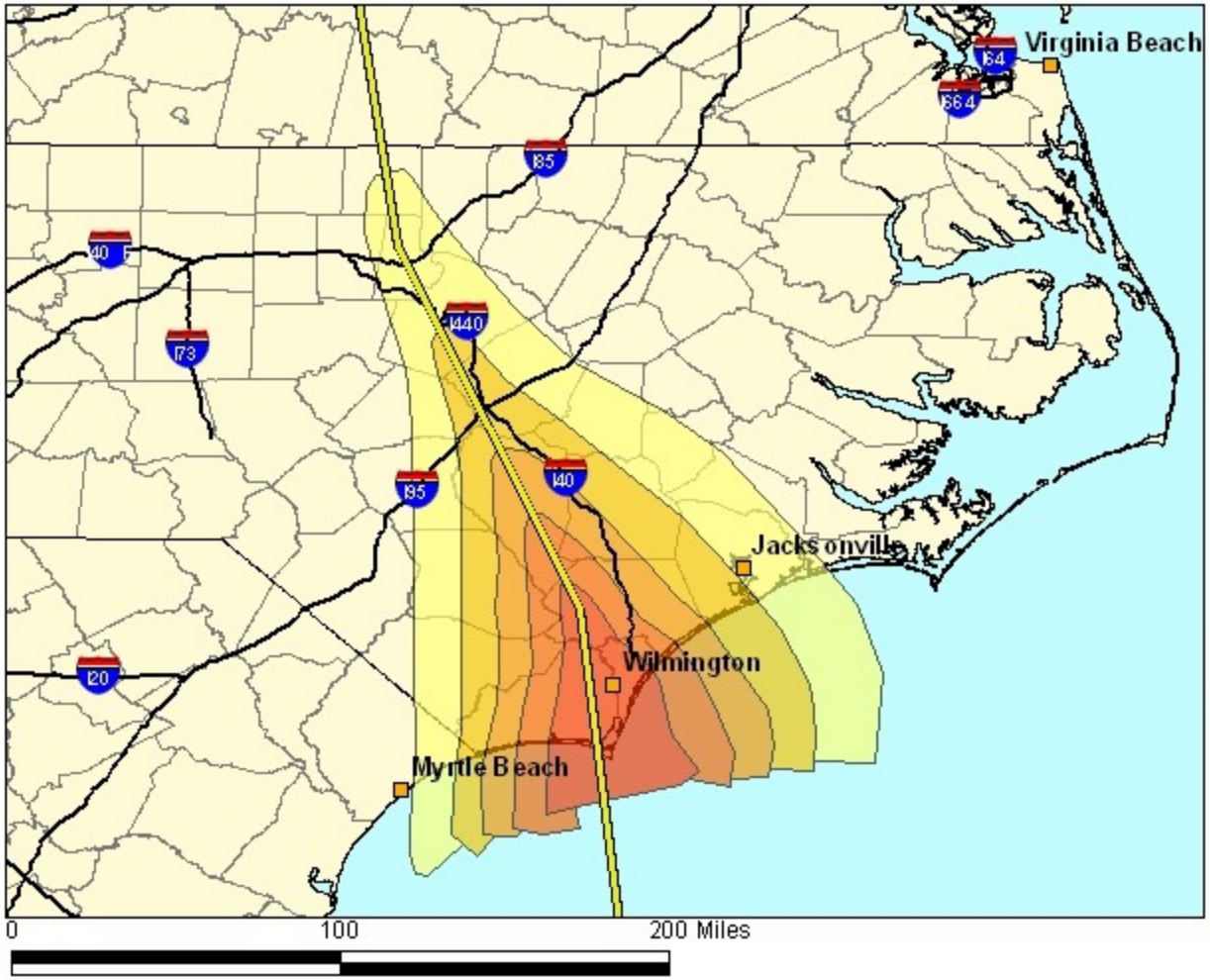
US Army Corps of Engineers

Landfall Plus About 12 Hours

For Official Use Only!

Post Landfall Projected Damage Areas

This model is based on a Category 4 storm making landfall near Wilmington, NC.



Forecast Track
Historic Track

Projected Damage Areas

- CAT 0-type damage
- CAT 1-type damage
- CAT 2-type damage
- CAT 3-type damage
- CAT 4-type damage
- CAT 5-type damage

Information provided on this page displays a Category 4 storm making landfall near Wilmington, NC. These projections are based on information from the NHC (0930 EDT 05/11/2007) forecast.

Details about this model may be obtained at https://englink.usace.army.mil or contact ENGLink at 1-877-936-4546

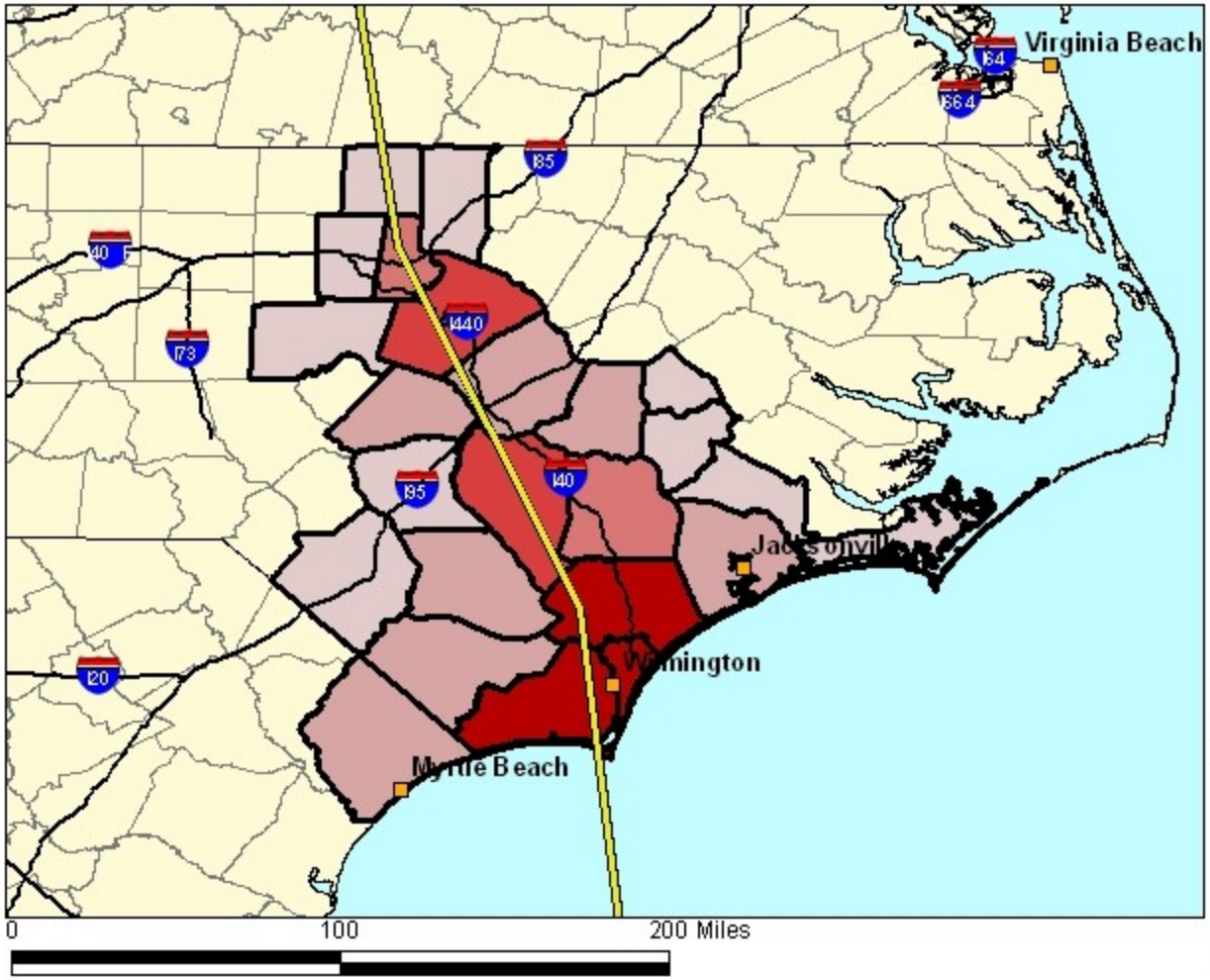
Hurricane Exercise Projected Damage Areas	
Generated By: Siemsen, LRL 1000 EDT 05/11/2007	
Sources: HURREVAC LRL-DEBRIS	Page 1 of 13

US Army Corps of Engineers

Hurricane Exercise Debris Model

Landfall Plus About **12** Hours

For Official Use Only!



Post Landfall Debris Model Results

North Carolina - 17,928,000 Yards
South Carolina - 102,000 Yards

Model results per county on following page

This model is based on a Category 4 storm making landfall near Wilmington, NC.

Forecast Track
Historic Track

Debris

- < 100,000 cubic yards
- 100,000 - 249,999 cubic yards
- 250,000 - 499,999 cubic yards
- 500,000 - 999,999 cubic yards
- >1,000,000 cubic yards

Information provided on this page displays a Category 4 storm making landfall near Wilmington, NC. These projections are based on information from the NHC (0930 EDT 05/11/2007) forecast. The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds.

Details about this model may be obtained at https://englink.usace.army.mil or contact ENGLink at 1-877-936-4546

Hurricane Exercise Debris Model	
Generated By: Siemsen, LRL 1000 EDT 05/11/2007	
Sources: HURREVAC LRL-DEBRIS	Page 2 of 13

US Army Corps of Engineers

Hurricane Exercise Debris Model

Landfall Plus About 12 Hours

For Official Use Only!

State	Yards per State	County	Yards per County
North Carolina		Bladen	151,000
		Brunswick	3,445,000
		Carteret	9,000
		Chatham	< 1,000
		Columbus	216,000
		Cumberland	39,000
		Duplin	317,000
		Durham	324,000
		Granville	14,000
		Greene	< 1,000
		Harnett	114,000
		Johnston	247,000
		Jones	11,000
		Lenoir	44,000
		New Hanover	9,896,000
		Onslow	213,000
		Orange	9,000
		Pender	1,177,000
		Person	26,000
		Robeson	< 1,000
		Sampson	563,000
		Wake	981,000
		Wayne	132,000
North Carolina	17,928,000		
South Carolina		Horry	102,000
South Carolina	102,000		

The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds.

Details about this model may be obtained at https://englink.usace.army.mil or contact ENGLink at 1-877-936-4546

Hurricane Exercise Debris Model

Generated By:
Siemsen, LRL 1000 EDT 05/11/2007

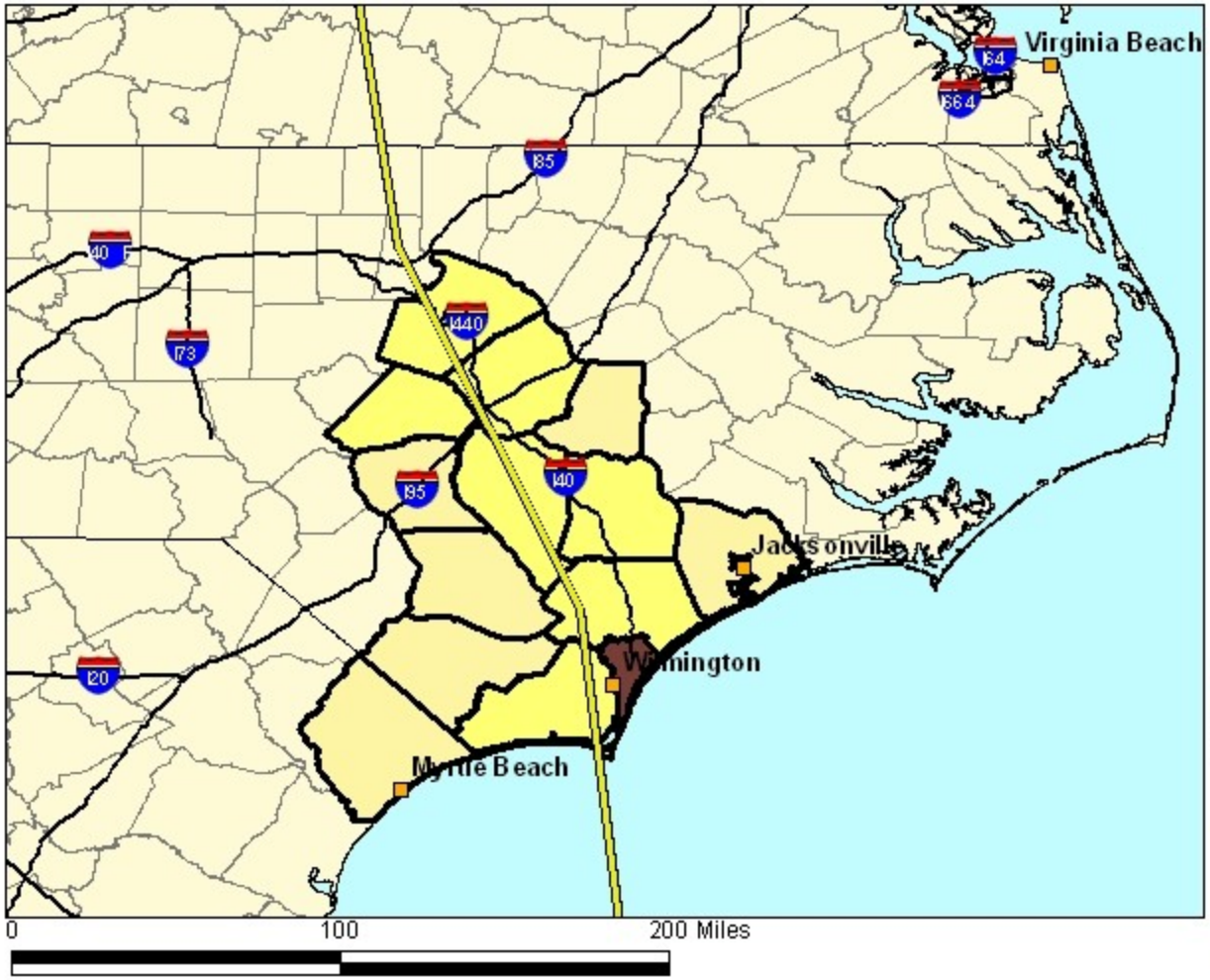
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Exercise Population Model

Landfall Plus About 12 Hours

For Official Use Only!



Post Landfall Population Model Results

North Carolina - 643,000
South Carolina - 8,000

Model results per county on following page

This model is based on a Category 4 storm making landfall near Wilmington, NC.

Forecast Track
Historic Track

Population

- < 25,000 persons
- 25,000 - 99,999 persons
- 100,000 - 174,999 persons
- 175,000 - 249,999 persons
- > 250,000 persons

Information provided on this page displays a Category 4 storm making landfall near Wilmington, NC. These projections are based on information from the NHC (0930 EDT 05/11/2007) forecast. The numbers of persons included in this model output are those that would be included within estimated hurricane force winds (Census 2000 values adjusted to July 2005 values).

Details about this model may be obtained at https://englink.usace.army.mil or contact ENGLink at 1-877-936-4546

Hurricane Exercise Population Model	
Generated By: Siemsen, LRL 1000 EDT 05/11/2007	
Sources: HURREVAC LRL-DEBRIS	Page 4 of 13

US Army Corps of Engineers

Hurricane Exercise Population Model

Landfall Plus About 12 Hours

For Official Use Only!

State	Population per State	County	Population per County
North Carolina		Bladen	15,000
		Brunswick	89,000
		Columbus	13,000
		Cumberland	2,000
		Duplin	47,000
		Harnett	27,000
		Johnston	53,000
		New Hanover	180,000
		Onslow	25,000
		Pender	47,000
		Sampson	62,000
		Wake	72,000
		Wayne	11,000
North Carolina	643,000		
South Carolina		Horry	8,000
South Carolina	8,000		

The number of persons estimated to be within the hurricane force winds comes from Census 2000 values adjusted to July 2005 values.

Details about this model may be obtained at **https://englink.usace.army.mil** or contact ENGLink at 1-877-936-4546

Hurricane Exercise Population Model

Generated By:
Siemsen, LRL 1000 EDT 05/11/2007

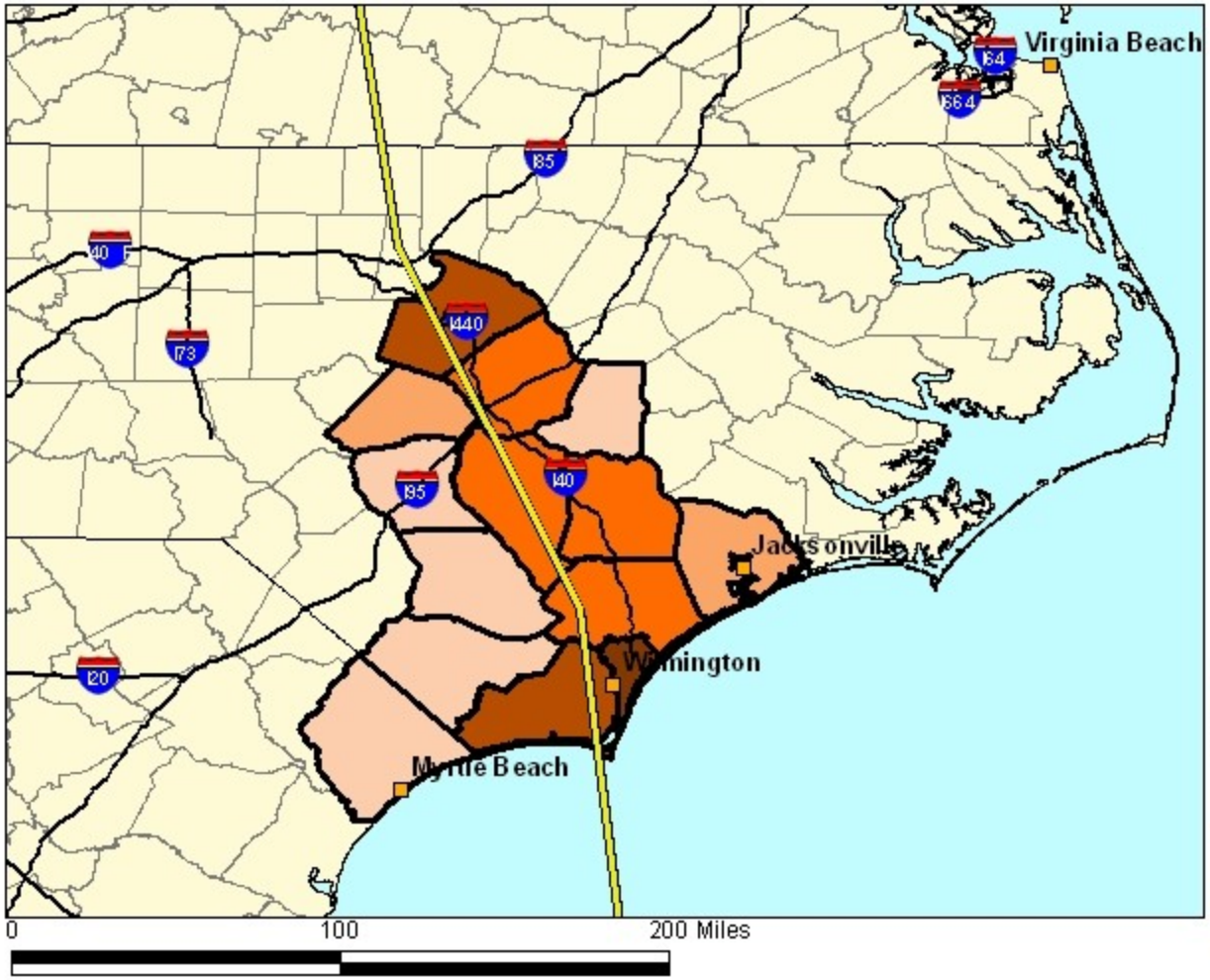
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Exercise Households Model

Landfall Plus About **12** Hours

For Official Use Only!



Post Landfall Households Model Results

North Carolina - 259,000
South Carolina - 4,000

Model results per county on following page

This model is based on a Category 4 storm making landfall near Wilmington, NC.

Forecast Track
Historic Track

Households

- < 7,500 households
- 7,500 - 14,999 households
- 15,000 - 24,999 households
- 25,000 - 49,999 households
- > 50000 households

Information provided on this page displays a Category 4 storm making landfall near Wilmington, NC. These projections are based on information from the NHC (0930 EDT 05/11/2007) forecast. The numbers of households included in this model output are those that would be included within estimated hurricane force winds (Census 2000 values adjusted to July 2005 values).

Details about this model may be obtained at https://englink.usace.army.mil or contact ENGLink at 1-877-936-4546

Hurricane Exercise Households Model	
Generated By: Siemsen, LRL 1000 EDT 05/11/2007	
Sources: HURREVAC LRL-DEBRIS	Page 6 of 13

US Army Corps of Engineers

Hurricane Exercise Households Model

Landfall Plus About 12 Hours

For Official Use Only!

State	Households per State	County	Households per County
North Carolina		Bladen	6,000
		Brunswick	37,000
		Columbus	5,000
		Cumberland	< 1,000
		Duplin	18,000
		Harnett	11,000
		Johnston	21,000
		New Hanover	77,000
		Onslow	10,000
		Pender	19,000
		Sampson	23,000
		Wake	27,000
		Wayne	5,000
North Carolina	259,000		
South Carolina		Horry	4,000
South Carolina	4,000		

The number of households estimated to be within the hurricane force winds comes from Census 2000 values adjusted to July 2005 values.

Details about this model may be obtained at https://englink.usace.army.mil or contact ENGLink at 1-877-936-4546

Hurricane Exercise Households Model

Generated By:
Siemsen, LRL 1000 EDT 05/11/2007

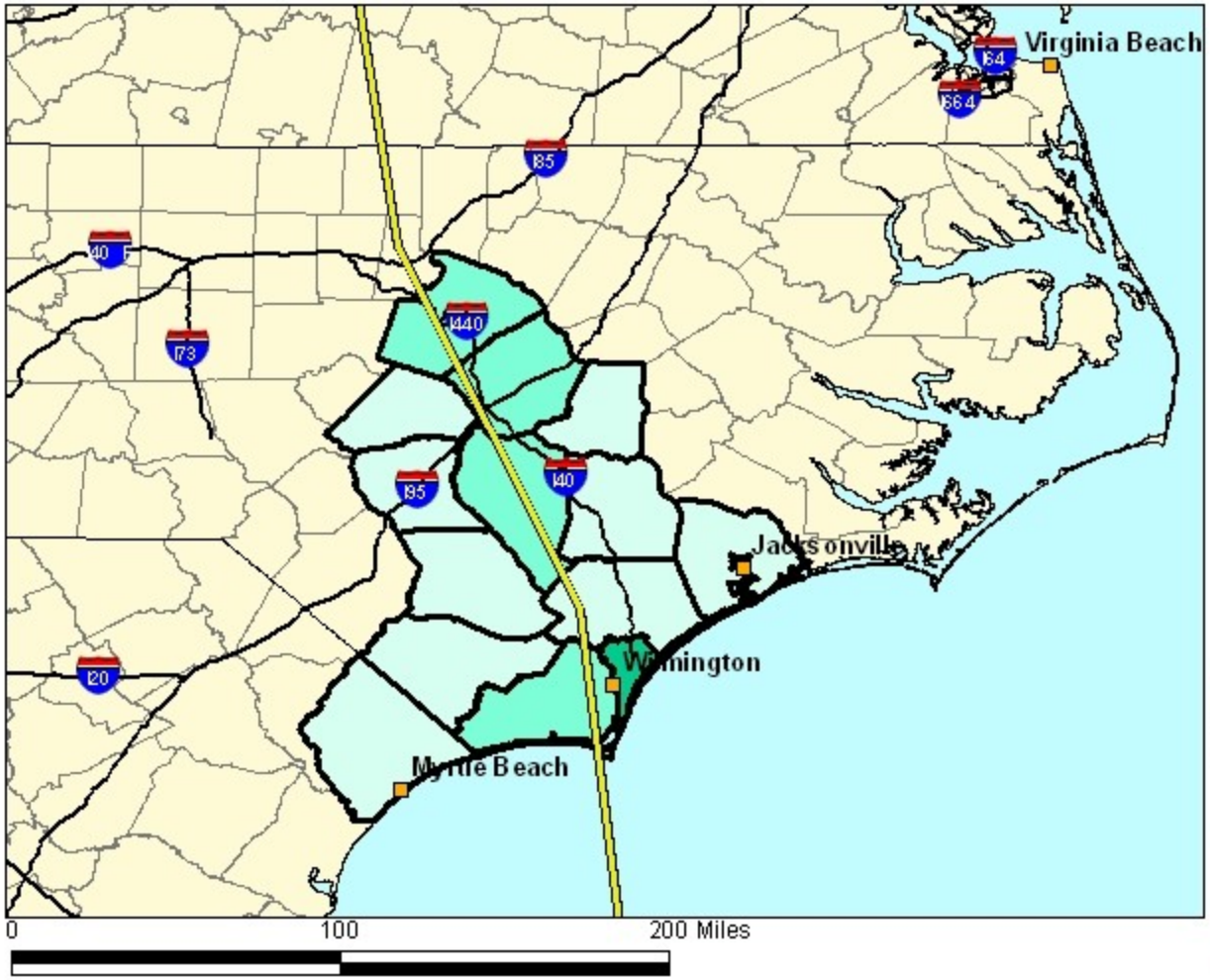
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane Exercise Commodities Model

Landfall Plus About **12** Hours

For Official Use Only!



Post Landfall Ice/Water Model Results

Day One / Day Two / Day Three
NC - 15/29/58 Truckloads
SC – 1/1/1 Truckloads

Model results per county on following page

This model is based on a Category 4 storm making landfall near Wilmington, NC.

Forecast Track
Historic Track

Commodities

- < 5 Trucks Each
- 5 - 10 Trucks Each
- 11 - 20 Trucks Each
- 21 - 40 Trucks Each
- > 40 Trucks Each

Information provided on this page displays a Category 4 storm making landfall near Wilmington, NC. These projections are based on information from the NHC ***(0930 EDT 05/11/2007)*** forecast. The amount of commodities forecasted is based on Mission Guide Book requirements (8 pounds of ice per person per day) and SME input. The graphic represents single day needs with full distribution system in place and operating.
Details about this model may be obtained at **https://englink.usace.army.mil**
or contact ENGLink at 1-877-936-4546

Hurricane Exercise Commodities Model	
Generated By: Siemsen, LRL 1000 EDT 05/11/2007	
Sources: HURREVAC LRL-DEBRIS	Page 8 of 13

US Army Corps of Engineers

Hurricane Exercise Commodities Model

Landfall Plus About **12** Hours

For Official Use Only!

State	Truckloads per State	County	Truckloads per County
North Carolina		Bladen	2
		Brunswick	8
		Columbus	2
		Cumberland	1
		Duplin	4
		Harnett	3
		Johnston	5
		New Hanover	15
		Onslow	2
		Pender	4
		Sampson	5
		Wake	6
		Wayne	1
North Carolina	58		
South Carolina		Horry	1
South Carolina	1		

The amount of commodities forecasted is based on Mission Guide Book requirements (8 pounds of ice per person per day) and SME input and the above table indicates suggested needs based on phased deployment of a commodities distribution system. The assumption in this scenario is that 40% of the resident population affected by the hurricane will have power outage in this area and cause a need for ice and water.

Details about this model may be obtained at **https://englink.usace.army.mil**
or contact ENGLink at 1-877-936-4546

Hurricane Exercise Commodities Model

Generated By:
Siemsen, LRL 1000 EDT 05/11/2007

Sources:
HURREVAC
LRL-DEBRIS

Hurricane Exercise Temporary Housing Model

US Army Corps of Engineers

Landfall Plus About **12** Hours

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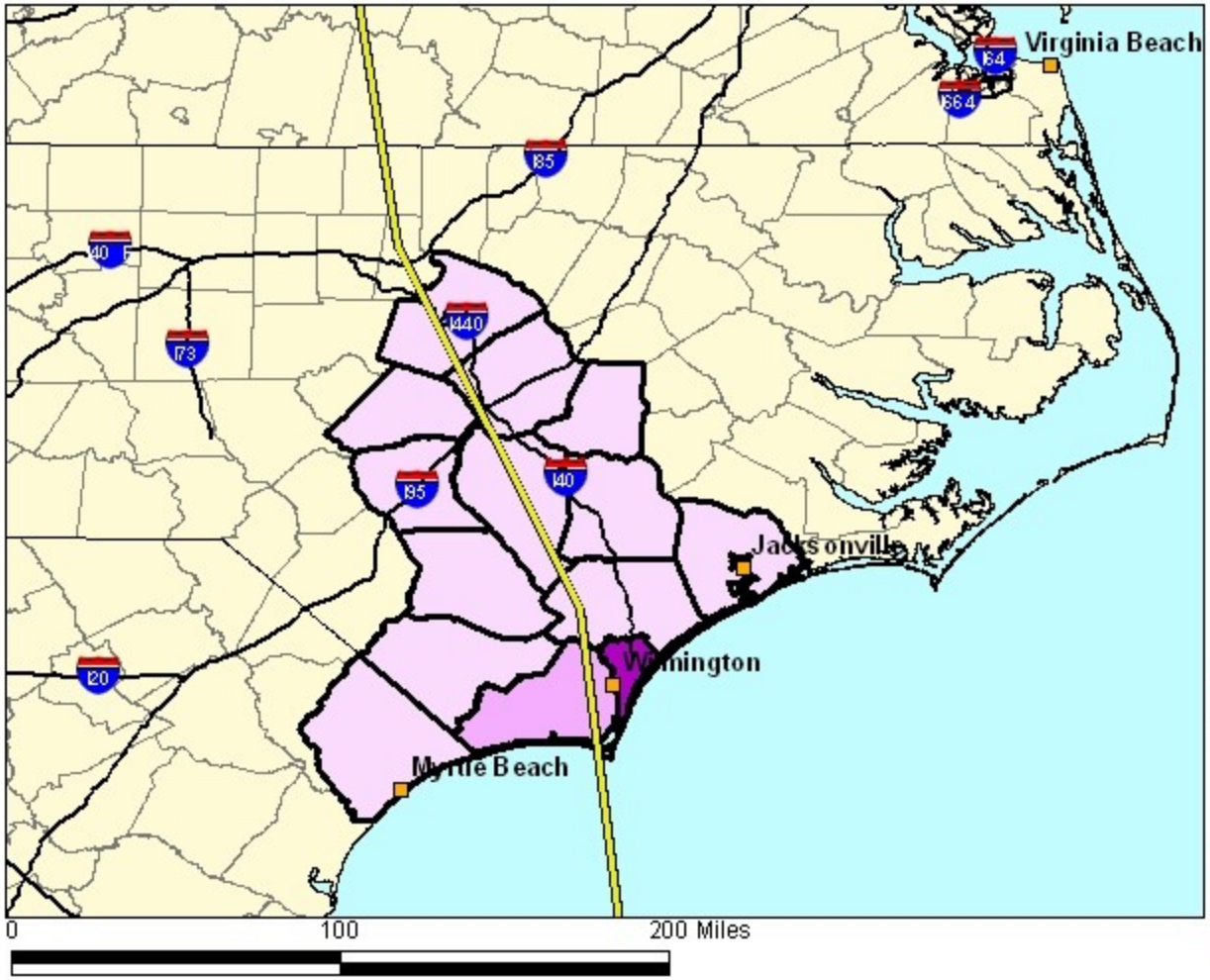

Post Landfall Temporary Housing Model Results

North Carolina - 12,000

Model results per county on following page

This model is based on a Category 4 storm making landfall near Wilmington, NC.

Forecast Track
Historic Track

Temporary Housing

- < 2,000 units
- 2,000 - 3,999 units
- 4,000 - 5,999 units
- 6,000 - 9,999 units
- > 10,000 units

Information provided on this page displays a Category 4 storm making landfall near Wilmington, NC. These projections are based on information from the NHC (0930 EDT 05/11/2007) forecast. Temporary housing is based on 1% in CAT 1, 3% in CAT 2, 5% in CAT 3 and 9% in CAT 4.

Details about this model may be obtained at https://englink.usace.army.mil or contact ENGLink at 1-877-936-4546

Hurricane Exercise Housing Model	
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Sources: HURREVAC LRL-DEBRIS	Page 10 of 13

US Army Corps of Engineers

Hurricane Exercise Temporary Housing Model

Landfall Plus About **12** Hours

For Official Use Only!

State	per State	County	per County
North Carolina		Bladen	200
		Brunswick	2,300
		Columbus	200
		Cumberland	< 100
		Duplin	400
		Harnett	200
		Johnston	300
		New Hanover	6,600
		Onslow	< 100
		Pender	900
		Sampson	600
		Wake	300
		Wayne	< 100
North Carolina	12,000		
South Carolina		Horry	< 100
South Carolina			

THIS IS AN EXPERIMENTAL MODEL!!

Temporary housing is based on 1% in CAT 1, 3% in CAT 2, 5% in CAT 3 and 9% in CAT 4.

Details about this model may be obtained at https://englink.usace.army.mil
or contact ENGLink at 1-877-936-4546

Hurricane Exercise Housing Model

Generated By:
Siemsen, LRL 1000 EDT 05/11/2007

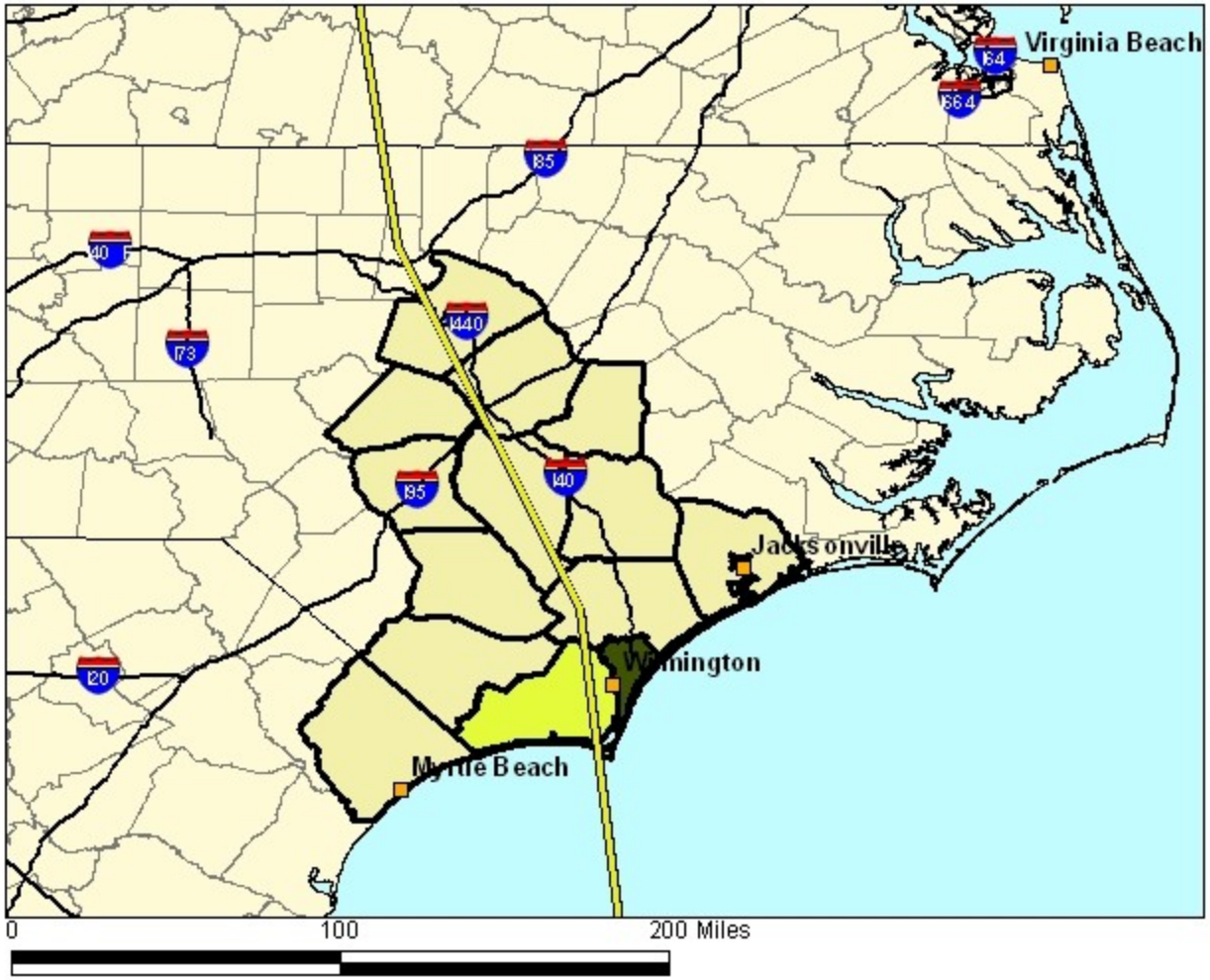
Sources:
HURREVAC
LRL-DEBRIS

Hurricane Exercise Temporary Roofing Model

US Army Corps of Engineers

Landfall Plus About **12** Hours

For Official Use Only!



Post Landfall Temporary Roofing Model Results

North Carolina - 19,000

Model results per county on following page

This model is based on a Category 4 storm making landfall near Wilmington, NC.

Forecast Track
Historic Track

Temporary Roofing

- < 2,000 units
- 2,000 - 3,999 units
- 4,000 - 5,999 units
- 6,000 - 9,999 units
- > 10,000 units

Information provided on this page displays a Category 4 storm making landfall near Wilmington, NC. These projections are based on information from the NHC (0930 EDT 05/11/2007) forecast. Temporary roofing is based on 2% in CAT 1, 5% in CAT 2, 9% in CAT 3 and 14% in CAT 4.

Details about this model may be obtained at https://englink.usace.army.mil or contact ENGLink at 1-877-936-4546

Hurricane Exercise Roofing Model	
Generated By: Siemsen, LRL 1000 EDT 05/11/2007	
Sources: HURREVAC LRL-DEBRIS	Page 12 of 13

US Army Corps of Engineers

Hurricane Exercise Temporary Roofing Model

Landfall Plus About 12 Hours

For Official Use Only!

State	House Units per State	County	House Units per County
North Carolina		Bladen	200
		Brunswick	3,600
		Columbus	300
		Cumberland	< 100
		Duplin	600
		Harnett	300
		Johnston	500
		New Hanover	10,300
		Onslow	200
		Pender	1,400
		Sampson	1,000
		Wake	600
		Wayne	< 100
North Carolina	19,000		
South Carolina		Horry	< 100
South Carolina			

THIS IS AN EXPERIMENTAL MODEL!!

Temporary roofing is based on 2% in CAT 1, 5% in CAT 2, 9% in CAT 3 and 14% in CAT 4.

Details about this model may be obtained at https://englink.usace.army.mil
or contact ENGLink at 1-877-936-4546

Hurricane Exercise Roofing Model

Generated By:
Siemsen, LRL 1000 EDT 05/11/2007

Sources:
HURREVAC
LRL-DEBRIS